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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,666	11/19/2001	Timothy P. Blair	10013014-1	8495

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EXAMINER

REFAI, RAMSEY

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,666

Applicant(s)

BLAIR ET AL.

Examiner

Ramsey Refai

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/19/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Bradford et al (U.S. Patent No. 6,728,770).
4. As per claim 1, Bradford et al teach a method for configuring data communication paths between a central controller and a plurality of devices, the method comprising:

ensuring a first appliance (**Figure 1, element 150 and column 3, lines 19-32; interface devices**) is active (**column 6, lines 54-64; checks if a path fails**);

for each of the devices (**Figure 1, 160,165**), determining a first communication capability between the first appliance and the device (**column 4, line 52 – column 5, lines 28 and Figure 3**);

transmitting signals indicative of the first communication capabilities (**column 4, line 44 – column 5, lines 28, and Figure 3, 310**) to the central controller (**Figure 1, 110-130**); and

mapping respective communication paths between the central controller and the devices via the first appliance as a function of the first communication capabilities to obtain an automatic appliance failover (**column 4, line 52 – column 5, lines 28, column 6, lines 54-64, and Figure 3**; if a communication path fails, the path balancing method would relocate the virtual peripheral devices on that communication path to another communication path. Since communication path contain interface devices, a communication path failure might be the result of an interface device failure).

5. As per claim 2, Bradford et al teach for each of the devices, identifying an optimal path between the appliance and the device (**column 4, line 11 – column 5, lines 28**); and

wherein the mapping includes: mapping the respective communication paths between the central controller and the devices as a function of the optimal paths (**column 4, lines 11-65**).

6. As per claim 3, Bradford et al teach the identifying includes at least one of: determining one of a plurality of paths between the appliance and the device having a least number of hops; and determining one of a plurality of paths between the appliance and the device achieving a shortest communication time (**column 1, lines 44-67**).

7. As per claim 4, Bradford et al teach that for each of the devices, determining a second communication capability between a second appliance and the device (**column 8, line 66 – column 9, line 8, column 4 lines 58 – column 5, lines 27**);

transmitting signals indicative of the second communication capabilities to the central controller (**column 8, line 66 – column 9, line 8, and column 4 lines 58 – column 5, lines 27**); and wherein the mapping includes:

mapping the respective communication paths between the central controller and the devices via the first and second appliances as a function of the first and second communication capabilities (**column 6, lines 54-64 and column 4 lines 58 – column 5, lines 27**).

8. As per claim 5, Bradford et al teach the mapping includes: substantially balancing respective device loads across the appliances (**column 1, lines 44-67, and column 4, line 58-column 5, line 57**).

9. As per claim 6, Bradford et al teach a method for gathering diagnostic data, which are associated with a plurality of devices, within a central processing unit, the method comprising:

determining which of a plurality of intermediate collectors are capable of communicating with the respective devices to obtain an automatic intermediate collector failover (**Figure 1, column 4, line 52 – column 5, lines 28, column 6, lines 54-64, and Figure 3**);

receiving a notification signal within the central processing unit that one of the intermediate collectors is available (**column 6, lines 54-64; checks if a path fails**);

identifying one of the devices for which the diagnostic data is desired (**column 4, line 52 – column 5, lines 28**);

determining whether the identified device is capable of communicating with the available intermediate collector (**column 7, lines 50-65 and column 6, lines 54-64**);

if the identified device is capable of communicating with the available intermediate collector:

transmitting a request signal from the central processing unit to the available intermediate collector requesting the diagnostic data for the identified device (**column 7, line 50-column 8, line 35**); and

transmitting signals indicative of the diagnostic data from the identified device to the central processing unit via the available intermediate collector (**column 4, line 58 – column 5, lines 27 and column 7, line 50-column 8, line 35**).

10. As per claim 7, Bradford et al teach determining optimal paths from each of the devices to the central processing unit via respective ones of the intermediate collectors (**column 4, line 11 – column 5, lines 28**); and

wherein the determining whether the identified device is capable of communicating with the available intermediate collector includes determining whether the identified device has an optimal path including the available intermediate collector (**column 1, lines 44-67**).

11. As per claim 8, Bradford et al teach if the central processing unit has not received the notification signal for a predetermined time that one of the intermediate collectors is available, retrieving the signals indicative of the diagnostic data for the devices having the respective optimal paths including the intermediate collector via another one of the intermediate collectors (**column 6, lines 54-64 and column 7, line 50 – column 8, line 35**).

12. As per claim 9, Bradford et al teach:

identifying an additional device for which the diagnostic data is desired (**column 6, lines 54-64 and column 7, line 50 – column 8, line 35**);

determining whether the additional identified device is capable of communicating with the available intermediate collector (**column 6, lines 54-64 and column 7, line 50 – column 8, line 35**);

if the identified device and the additional identified device are capable of communicating with the available intermediate collector:

determining a balanced load for the available intermediate collector to include at least one of the identified devices (**column 5, lines 10-57 and column 7, line 50 – column 8, line 36**);

transmitting a request signal from the central processing unit to the available intermediate collector requesting the diagnostic data for the balanced load (**column 5, lines 10-57 and column 7, line 50 – column 8, line 36**); and

transmitting signals indicative of the diagnostic data from the balanced load to the central processing unit via the available intermediate collector (**column 5, lines 10-57 and column 7, line 50 – column 8, line 36**).

13. As per claim 10, Bradford et al teach determining the balanced load includes:

determining whether at least one of the identified devices is capable of communicating with another one of the intermediate collectors (**column 4, lines 10-36, column 5, lines 10-57 and column 7, line 50 – column 8, line 36**).

14. As per claim 11, Bradford et al teach:

transmitting signals indicative of identifiers of the intermediate collectors and the respective devices with which the intermediate identifiers are capable of communicating to the central processing unit (**column 7, line 50 – column 8, line 60**); and

wherein the determining whether the identified device is capable of communicating with the available intermediate collector includes: comparing the identifier of the identified device with the identifiers of the devices capable of communicating with the available intermediate collector (**column 5, lines 10-57 and column 7, line 50 – column 8, line 36**).

15. As per claims 12 – 19, these claims fail to add any new limitations and contain similar limitations as claims 1-11 above, therefore are rejected under the same rationale.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Oehrke et al (U.S. Patent No. 6,735,631)
- b. Ahmed et al (U.S. Patent No. 6,629,148)
- c. Denecheau et al (U.S. Patent No. 6,421,317)
- d. Bawa et al (U.S. Patent No. 6,697,333)
- e. Flockhart et al (U.S. Patent No. 6,678,371)
- f. Denecheau et al (U.S. Patent No. 6,421,317)
- g. Doyle et al (U.S. Patent No. 6,839,700)


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- h. Cheng et al (U.S. Patent No. 6,802,021)
- i. Mizuno (U.S. Patent No. 6,785,715)
- j. Lindhorst-Ko (U.S. Patent No. 6,725,401)
- k. Bereiter (U.S. Patent No. 6,581,104).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 **JOHN FOLLANSBEE**
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Ramsey Refai
Examiner
Art Unit 2154

RR
February 7, 2005